

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): An organic electroluminescent device in which an organic thin film layer comprising a single layer or plural layers comprising a phosphorescence light-emitting layer containing at least a host material and a phosphorescent organic metal complex is interposed between a cathode and an anode, wherein the total of halogen element mass concentrations of bromine, iodine and chlorine which are contained as impurities in the host material constituting the light-emitting layer described above is 50 ppm or less.

Claim 2 (Original): An organic electroluminescent device in which an organic thin film layer comprising a single layer or plural layers comprising a phosphorescence light-emitting layer containing at least a host material and a phosphorescent organic metal complex is interposed between a cathode and an anode, wherein the total of halogen element mass concentrations of bromine and iodine which are contained as impurities in the host material constituting the light-emitting layer described above is 40 ppm or less.

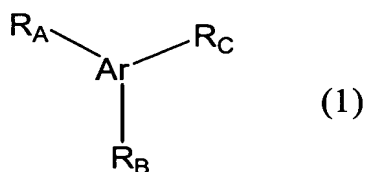
Claim 3 (Original): An organic electroluminescent device in which an organic thin film layer comprising a single layer or plural layers comprising a phosphorescence light-emitting layer containing at least a host material and a phosphorescent organic metal complex is interposed between a cathode and an anode, wherein a halogen element mass concentration of bromine which is contained as an impurity in the host material constituting the light-emitting layer described above is 30 ppm or less.

Claim 4 (Original): The organic electroluminescent device as described in claim 1, wherein the total of halogen element mass concentrations of bromine, iodine and chlorine is 5 ppm or less.

Claim 5 (Currently Amended): The organic electroluminescent device as described in ~~any of claims 1 to 4~~ claim 1, wherein a lower limit of the total of the halogen element mass concentrations described above is 1 ppb.

Claim 6 (Currently Amended): The organic electroluminescent device as described in ~~any of claims 1 to 3~~ claim 3, wherein the light-emitting layer described above contains at least one selected from phosphorescent organic metal complexes and at least one selected from aromatic hydrocarbon compounds and aromatic heterocyclic compounds.

Claim 7 (Original): The organic electroluminescent device as described in claim 6, wherein the aromatic hydrocarbon compound and the aromatic heterocyclic compound each described above each have a structure represented by the following Formula (1):



wherein Ar represents a substituted or non-substituted trivalent aromatic hydrocarbon group having 6 to 30 ring carbon atoms or a substituted or non-substituted trivalent aromatic heterocyclic group having 3 to 20 ring carbon atoms; R_A , R_B and R_C each represent independently a substituted or non-substituted aromatic hydrocarbon group having 6 to 30 ring carbon atoms, a substituted or non-substituted aromatic heterocyclic group having 3 to

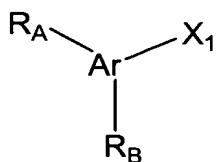
20 ring carbon atoms or a substituted or non-substituted amino group; R_A , R_B and R_C each may be the same or different, and adjacent ones may be combined with each other.

Claim 8 (Original): The organic electroluminescent device as described in claim 6, wherein the aromatic hydrocarbon compound and the aromatic heterocyclic compound each described above each have a structure represented by the following Formula (2):

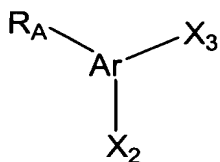


wherein Ar' represents a substituted or non-substituted divalent aromatic hydrocarbon group having 6 to 30 ring carbon atoms or a substituted or non-substituted divalent aromatic heterocyclic group having 3 to 20 ring carbon atoms; R_A and R_B each represent independently a substituted or non-substituted aromatic hydrocarbon group having 6 to 30 ring carbon atoms, a substituted or non-substituted aromatic heterocyclic group having 3 to 20 ring carbon atoms or a substituted or non-substituted amino group, and R_A and R_B each may be the same or different.

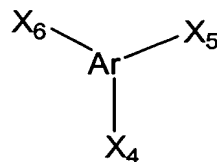
Claim 9 (Currently Amended): The organic electroluminescent device as described in ~~any of claims 1 to 3~~ claim 2, wherein halides containing the halogen elements described above have at least one structure represented by the following Formulas (3) to (5):



(3)



(4)



(5)

wherein Ar represents a substituted or non-substituted trivalent aromatic hydrocarbon group having 6 to 30 ring carbon atoms or a substituted or non-substituted trivalent aromatic heterocyclic group having 3 to 20 ring carbon atoms; R_A and R_B each represent independently

a substituted or non-substituted aromatic hydrocarbon group having 6 to 30 ring carbon atoms, a substituted or non-substituted aromatic heterocyclic group having 3 to 20 ring carbon atoms or a substituted or non-substituted amino group; R_A , R_B and R_C each may be the same or different;

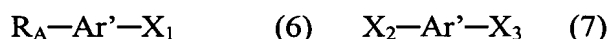
in Formula (3), X_1 represents a halogen atom;

in Formula (4), one of X_2 to X_3 represents a halogen atom, and the remainder represents a halogen atom or a hydrogen atom;

in Formula (5), at least one of X_4 to X_6 represents a halogen atom, and the remainder represents a halogen atom or a hydrogen atom; and

provided that when X_2 to X_6 are hydrogen atoms, Ar is reduced in a valency according to the number of the hydrogen atoms; and when two or more of X_2 to X_3 or X_4 to X_6 are halogen atoms, they may be the same atom.

Claim 10 (Currently Amended): The organic electroluminescent device as described in ~~any of claims 1 to 3~~ claim 1, wherein halides containing the halogen elements described above have structures represented by the following Formulas (6) and/or (7):



wherein Ar' represents a substituted or non-substituted divalent aromatic hydrocarbon group having 6 to 30 ring carbon atoms or a substituted or non-substituted divalent aromatic heterocyclic group having 3 to 20 ring carbon atoms; R_A each represents independently a substituted or non-substituted aromatic hydrocarbon group having 6 to 30 ring carbon atoms, a substituted or non-substituted aromatic heterocyclic group having 3 to 20 ring carbon atoms or a substituted or non-substituted amino group;

in Formula (6), X_1 represents a halogen atom;

in Formula (7), one of X_2 to X_3 represents a halogen atom, and the remainder represents a halogen atom or a hydrogen atom;

provided that when X_2 to X_3 are hydrogen atoms, Ar' is reduced in a valency according to the number of the hydrogen atoms; and when two or more of X_2 to X_3 are halogen atoms, they may be the same atom.

Claim 11 (Original): The organic electroluminescent device as described in claim 7, wherein in Formula (1), Ar is benzenetriyl, pyridinetriyl, pyrimidinetriyl or triazinetriyl.

Claim 12 (Original): The organic electroluminescent device as described in claim 8, wherein in Formula (2), Ar' is phenylene, biphenylene, pyridinediyl, pyrimidinediyl or triazinediyl.

Claim 13 (Original): The organic electroluminescent device as described in claim 7, wherein the phosphorescence light-emitting layer described above contains the aromatic hydrocarbon compound having the structure represented by Formula (1) described above.

Claim 14 (Original): The organic electroluminescent device as described in claim 8, wherein the phosphorescence light-emitting layer described above contains the aromatic hydrocarbon compound having the structure represented by Formula (2) described above.

Claim 15 (Original): The organic electroluminescent device as described in claim 9, wherein the phosphorescence light-emitting layer described above contains the halide having at least one structure represented by Formulas (3) to (5) described above.

Claim 16 (Original): The organic electroluminescent device as described in claim 10, wherein the phosphorescence light-emitting layer described above contains the halides having the structures represented by Formulas (6) and/or (7) described above.

Claim 17 (Currently Amended): The organic electroluminescent device as described in ~~any of claims 1 to 3~~ claim 1, wherein the halogen element mass concentration described above is identified by inductively coupled plasma-mass spectrometry (ICP-MS analysis) or a coulometric titration method.

Claim 18 (Currently Amended): The organic electroluminescent device as described in ~~any of claims 1 to 3~~ claim 1, wherein a halogen element mass concentration of at least one halide contained in a material constituting a hole transporting layer, an electron transporting layer or a hole blocking layer which is adjacent to the light-emitting layer is 20 ppm or less.

Claim 19 (Original): A material for an organic electroluminescent device, wherein the halogen element mass concentrations of bromine, iodine and chlorine as impurities are identified respectively by inductively coupled plasma-mass spectrometry (ICP-MS analysis) or a coulometric titration method.

Claim 20 (Original): The material for an organic electroluminescent device as described in claim 19, wherein the halogen element mass concentration described above is 1 ppb to 50 ppm.

Claim 21 (Original): The material for an organic electroluminescent device as described in claim 19, wherein a halogen element mass concentration of bromine as an impurity is 30 ppm or less.

Claim 22 (Original): A phosphorescent organic metal complex, wherein the total amount of the halogen element mass concentrations of bromine, iodine and chlorine as impurities which are identified by inductively coupled plasma-mass spectrometry (ICP-MS analysis) or a coulometric titration method is 1 ppb to 5 ppm.

Claim 23 (Original): A host material for an organic electroluminescent device, the total amount of the halogen element mass concentrations of bromine, iodine and chlorine as impurities which are identified by inductively coupled plasma-mass spectrometry (ICP-MS analysis) or a coulometric titration method is 1 ppb to 5 ppm.

Claim 24 (Original): An organic electroluminescent device in which an organic thin film layer comprising a single layer or plural layers comprising a phosphorescence light-emitting layer containing at least a host material and a phosphorescent organic metal complex is interposed between a cathode and an anode, wherein the light-emitting layer described above is formed by using the phosphorescent organic metal complex as described in claim 22 and the host material as described in claim 23.